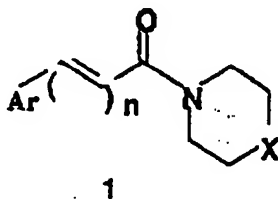


**AMENDMENTS TO THE CLAIMS**

Please cancel claims 4-6 without prejudice or disclaimer to the subject matter described therein. Please amend claims 1-3 as indicated below.

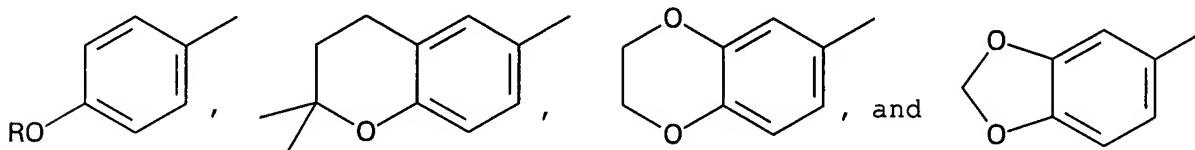
1. (Currently amended) An ~~Novel~~ arylalkenoic acid heterocyclic amide compound of general formula (I) ~~useful as food additives and in pharmaceutical applications,~~



wherein  $n = 1$  or  $2$ ,

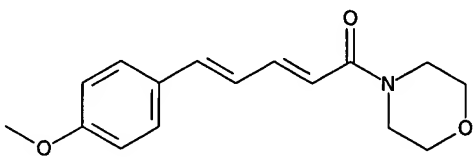
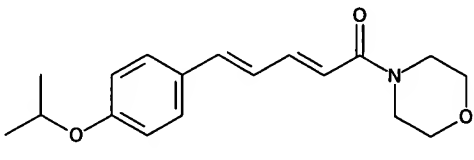
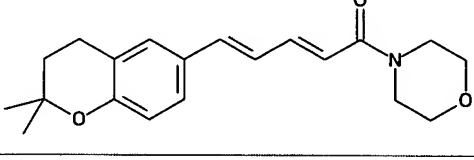
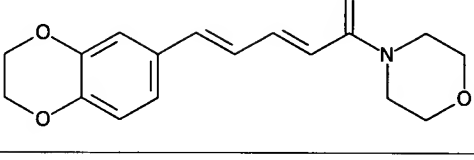
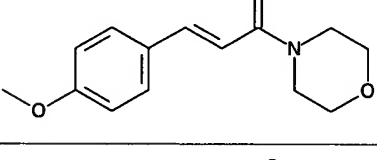
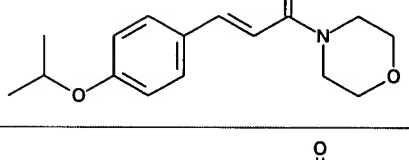
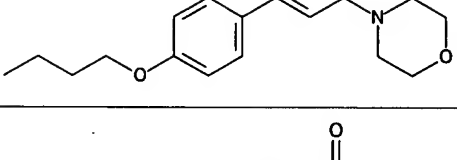
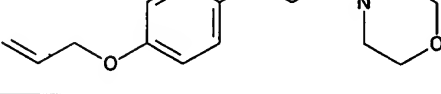
$X = O$  or  $N-CH_3$  and

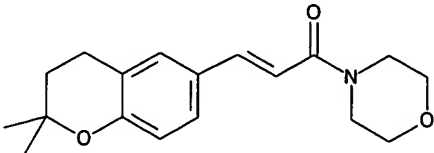
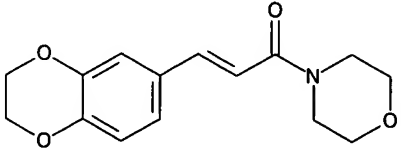
$Ar =$



wherein  $R$  = linear or branched  $C_1$  to  $C_5$  alkyl chain.

2. (Currently amended) An arylalkenoic ~~Arylalkenoic~~ acid heterocyclic amide compound ~~compounds~~ as claimed in claim 1 wherein the ~~preferred~~ compound is selected from the group consisting of ~~having structure and names as given below:~~

S.No	Structure	M.F.	M.P.°C	Pungency index
i		$C_{16}H_{19}NO_3$	133	$10^6$
ii		$C_{18}H_{23}NO_3$	134	$10^1$
iii		$C_{20}H_{25}NO_3$	171	$10^4$
iv		$C_{17}H_{19}NO_4$	137	$10^4$
v		$C_{14}H_{17}NO_3$	95	$10^5$
vi		$C_{16}H_{21}NO_3$	98	$10^6$
vii		$C_{18}H_{23}NO_3$	117	$10^7$
viii		$C_{17}H_{23}NO_3$	70	$10^4$

ix		$C_{16}H_{19}NO_3$	88	$10^6$
x		$C_{15}H_{17}NO_4$	139	$10^4$

Compound No.	Compound Name
i)	5- (4 -methoxy phenyl) - 2E, 4E-pentadienoic acid morpholine amide
ii)	5- (4 - isopropoxy phenyl) - 2E, 4E-pentadienoic acid morpholine amide
iii)	5- (2H)-2,2-dimethyl-3,4-dihydro-benzopyran-6yl -2E, 4E-pentadienoic acid morpholine amide
iv)	5- (3,4 -ethylenedioxy phenyl) - 2E, 4E-pentadienoic acid morpholine amide
v)	3-(4 -methoxy phenyl)-2E-propenoic acid morpholine amide
vi)	3-(4 -isopropoxy phenyl)-2E- propenoic acid morpholine amide
vii)	3-(4 -butyloxy phenyl)-2E- propenoic acid morpholine amide
viii)	3-(4 -allyloxy phenyl)-2E- propenoic acid morpholine amide
ix)	3-[(2H)-2,2-dimethyl-3,4-dihydro-benzopyran-6yl]-2E-propenoic acid morpholine amide
x)	3 - (3,4 -ethylenedioxy phenyl) - 2E-propenoic acid morpholine amide

3. (Currently amended) A method for flavoring food,  
comprising the use of a compound of Formula 1 ~~Compounds as claimed~~  
~~in claim 1 are useful~~ as thermogenic, pungent, spicy agents , or  
~~and constitute as~~ food additives.

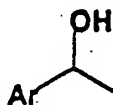
4. (Canceled).

5. (Canceled).

6. (Canceled).

7. (Withdrawn) A process for the preparation of aryl alkenoic acid heterocyclic amides as claimed in claim 1, the said process comprising steps of:

(a) reacting aldehyde of general formula (5) with alkyl magnesium halide with constant stirring at an ambient temperature in an anhydrous ethereal solvent to produce corresponding phenyl ethanol of general formula (4),



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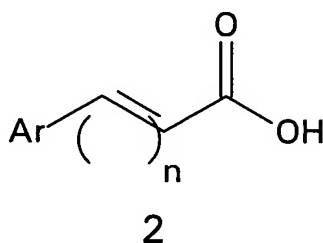


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(b) treating the compound of general formula (4) with dimethyl formamide and phosphorous oxychloride at 0° to 10°C for 20-40 hours, working up the reaction mixture by adjusting the pH of the solution and isolating the product of general formula (3) by using conventional method,

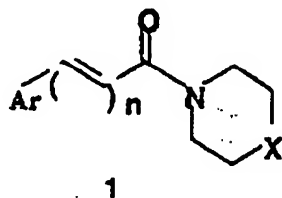
(c) reacting the compound of general formula (3) with witting reagent in presence of a base at a temperature range of 15-80°C in an ethereal solvent for a period of 1-80 hours to get the corresponding carboxylic ester.

(d) hydrolysing the ester of step (c) with strong alkali solution followed by acidification of the reaction mixture to produce the corresponding carboxylic acid of general formula (2),



(e) reacting compound of step (d) of general formula (2) with thionyl chloride in presence of an organic solvent at a temperature in the range of reflux temperature of  $70^{\circ}\text{C}$ - $80^{\circ}\text{C}$ , removing the solvent to obtain the corresponding acid chloride,

(f) reacting the acid chloride of step (e) with heterocyclic amine in an inert organic solvent at a temperature in the range of  $0$  to  $50^{\circ}\text{C}$  for 1 to 16 hours, isolating the product by purifying the reaction mixture to obtain product of formula (I).



8. (Withdrawn) A process as claimed in claim 7, wherein in step (a) the alkyl magnesium halide used is methyl magnesium iodide.

9. (Withdrawn) A process as claimed in claim 7, wherein in step (a) the ethereal solvent used is selected from the group consisting of diethyl ether and tetrahydrofuran and preferably tetrahydrofuran.

10. (Withdrawn) A process as claimed in claim 7, wherein in step (b) the solution of the reaction mixture is adjusted to pH 6 to 8.

11. (Withdrawn) A process as claimed in claim 7, wherein in step (b) the product after pre adjustment is isolated by either filtration or extraction with an organic solvent selected from the group consisting of ethylacetate, chloroform, dichloromethane and dichloroethane, preferably ethylacetate.

12. (Withdrawn) A process as claimed in claim 7, wherein in step (c), the witting reagent used is prepared from the reaction of equimolar mixture of triphenyl phosphine and bromomethyl acetate or bromoethylacetate and preferably bromoethylacetate.

13. (Withdrawn) A process as claimed in claim 7, wherein in step (c) the base used is selected from a group consisting of sodium hydride, sodium methoxide and sodium ethoxide and preferably sodium hydride.

14. (Withdrawn) A process as claimed in claim 7, wherein in step (c) the ethereal solvent used is selected from a group consisting of diethylether, dimethoxyethane, tetrahydrofuran, chloroform, and dichloromethane and preferably dichloromethane.

15. (Withdrawn) A process as claimed in claim 7, wherein in step (d) the alkali used for hydrolysis is selected from a group consisting of sodium hydroxide, potassium hydroxide and calcium hydroxide and most preferably sodium hydroxide.

16. (Withdrawn) A process as claimed in claim 7, wherein in step (d) the acidification is performed using sulfuric acid or hydrochloric acid and preferably hydrochloric acid.

17. (Withdrawn) A process as claimed in claim 7, wherein in step (e) the organic solvent used for extraction is selected from a group consisting of dichloromethane, benzene, diethylether and toluene preferably dichloromethane.

18. (Withdrawn) A process as claimed in claim 7, wherein in step (f) the organic solvent used is selected from a group consisting of benzene, toluene, dichloromethane and ethyl acetate and preferably dichloromethane.

19. (Withdrawn) A process as claimed in claim 7; wherein in step (f) the purification of the product is carried out by employing crystallization or column chromatography technique.